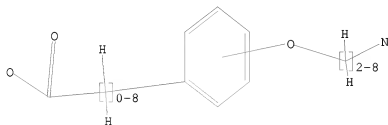


10/508,893

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L1 STRUCTURE UPLOADED

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L1 HAS NO ANSWERS
L1 STR
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Structure attributes must be viewed using STN Express query preparation.

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FULL SEARCH INITIATED 11:01:24 FILE 'REGISTRY'
FULL SCREEN SEARCH COMPLETED - 2514382 TO ITERATE

38.0% PROCESSED 956360 ITERATIONS 1018 ANSWERS

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39.8% PROCESSED 1000000 ITERATIONS 1060 ANSWERS
INCOMPLETE SEARCH (SYSTEM LIMIT EXCEEDED)
SEARCH TIME: 00.00.24
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FULL FILE PROJECTIONS:  ONLINE  **INCOMPLETE**
                        BATCH   **INCOMPLETE**
PROJECTED ITERATIONS:   2514382 TO 2514382
PROJECTED ANSWERS:      2511 TO 2819

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L3 135 L2

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L4 ANSWER 1 OF 9 CAPLUS COPYRIGHT 2008 ACS on STN
 ACCESSION NUMBER: 2008:208799 CAPLUS
 DOCUMENT NUMBER: 148:275678
 TITLE: Vitronectin receptor antagonist pharmaceuticals
 INVENTOR(S): Rajopadhye, Milind; Barrett, John A.; Carpenter, Jr.,
 Alan P.; Cheesman, Edward H.; Harris, Thomas D.
 PATENT ASSIGNEE(S): Bristol-Myers Squibb Pharma Company, USA
 SOURCE: U.S., 133pp., Cont.-in-part of U.S. Ser. No. 466,588.
 CODEN: USXXAM
 DOCUMENT TYPE: Patent
 LANGUAGE: English
 FAMILY ACC. NUM. COUNT: 8
 PATENT INFORMATION:

| PATENT NO. | KIND | DATE | APPLICATION NO. | DATE |
|------------------------|------|----------|-----------------|--------------|
| US 7332149 | B1 | 20080219 | US 2000-599890 | 20000621 |
| US 6322770 | B1 | 20011127 | US 1999-281207 | 19990330 <-- |
| US 20020015680 | A1 | 20020207 | US 1999-281209 | 19990330 |
| US 6524553 | B2 | 20030225 | | |
| US 6548663 | B1 | 20030415 | US 1999-281050 | 19990330 |
| US 6794518 | B1 | 20040921 | US 1999-466588 | 19991217 |
| US 20030124120 | A1 | 20030703 | US 2002-269252 | 20021011 |
| US 20030149262 | A1 | 20030807 | US 2002-306054 | 20021126 |
| US 20050154185 | A1 | 20050714 | US 2004-770380 | 20040202 |
| US 7321045 | B2 | 20080122 | | |
| PRIORITY APPLN. INFO.: | | | US 1998-112829P | P 19981218 |
| | | | US 1999-466588 | A2 19991217 |
| | | | US 1998-80150P | P 19980331 |
| | | | US 1998-112715P | P 19981218 |
| | | | US 1998-112732P | P 19981218 |
| | | | US 1998-112831P | P 19981218 |
| | | | US 1999-281050 | A3 19990330 |
| | | | US 1999-281209 | A3 19990330 |

GI

* STRUCTURE DIAGRAM TOO LARGE FOR DISPLAY - AVAILABLE VIA OFFLINE PRINT *

AB The present invention describes novel compds. comprising at least one of a chemotherapeutic agent or a radiosensitizer agent, and further comprising a diagnostic or therapeutic metallopharmaceutical selected from defined ^{99m}Tc complexes, e.g., ^{99m}Tc(L)(tricine)(TPPTS) where L = diazenido derivative of polyfunctional benzenesulfonic acid I and TPPTS = tris(m-sulphophenyl)phosphine trisodium salt, or various indium, lutetium, yttrium or gadolinium polyfunctionalized DOTA-type complexes, e.g., indium complex II, useful for the diagnosis and treatment of cancer, methods of imaging tumors in a patient, and methods of treating cancer in a patient. The pharmaceuticals are thus comprised of a targeting moiety that binds to the vitronectin receptor that is expressed in tumor vasculature, an optional linking group, and a therapeutically effective radioisotope or

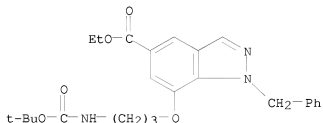
diagnostically effective imageable moiety. The present invention also provides novel compds. useful for monitoring therapeutic angiogenesis treatment and destruction of new angiogenic vasculature. The present invention also provides novel compds. useful for imaging atherosclerosis, restenosis, cardiac ischemia, and myocardial reperfusion injury. The present invention also provides novel compds. useful for the treatment of rheumatoid arthritis. The pharmaceuticals are comprised of a targeting moiety that binds to a receptor that is upregulated during angiogenesis, an optional linking group, and a therapeutically effective radioisotope or diagnostically effective imageable moiety. The imageable moiety is a gamma ray or positron emitting radioisotope, a magnetic resonance imaging contrast agent, an x-ray contrast agent, or an ultrasound contrast agent.

IT 1007219-80-8P 1007219-81-9P

RL: PRPH (Prophetic); RCT (Reactant); SPN (Synthetic preparation); PREP (Preparation); RACT (Reactant or reagent)
(vitronectin receptor antagonist metallopharmaceuticals as chemotherapeutic or radiosensitizer agents)

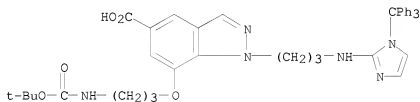
RN 1007219-80-8 CAPLUS

CN 1H-Indazole-5-carboxylic acid, 7-[3-[[[1,1-dimethylethoxy]carbonyl]amino]propoxy]-1-(phenylmethyl)-, ethyl ester (CA INDEX NAME)



RN 1007219-81-9 CAPLUS

CN 1H-Indazole-5-carboxylic acid, 7-[3-[[[1,1-dimethylethoxy]carbonyl]amino]propoxy]-1-[3-[[[1-(triphenylmethyl)-1H-imidazol-2-yl]amino]propyl]- (CA INDEX NAME)



REFERENCE COUNT: 148 THERE ARE 148 CITED REFERENCES AVAILABLE FOR THIS RECORD. ALL CITATIONS AVAILABLE IN THE RE FORMAT

L4 ANSWER 2 OF 9 CAPLUS COPYRIGHT 2008 ACS on STN

ACCESSION NUMBER: 1966:20052 CAPLUS

DOCUMENT NUMBER: 64:20052

ORIGINAL REFERENCE NO.: 64:3741b-g
 TITLE: Aminoarylidenacetone nitrile dyes
 PATENT ASSIGNEE(S): Farbenfabriken Bayer A.-G.
 SOURCE: 16 pp.
 DOCUMENT TYPE: Patent
 LANGUAGE: Unavailable
 FAMILY ACC. NUM. COUNT: 1
 PATENT INFORMATION:

| PATENT NO. | KIND | DATE | APPLICATION NO. | DATE |
|------------------------|------|----------|-----------------|--------------|
| NL 6500517 | | 19650719 | NL 1965-517 | 19650115 <-- |
| BE 658426 | | | BE | |
| FR 1425609 | | | FR | |
| PRIORITY APPLN. INFO.: | | | DE | 19640117 |

GI For diagram(s), see printed CA Issue.

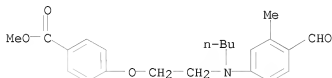
AB Greenish yellow dyes of the general formula I for polyester fabrics were prepared; in formula I, R is H or Me, R1 Et, Bu, or PhOCH2CH2, R2 = H or MeO2C, X = CN or CO2Et, and Y is CO2, OCO2, or O. Bu(HOCH2CH2)NPh (II) 19.3, C6H6 100, powdered K2CO3 13.8, present with p-MeO2CC6H4COCl 19.9 parts, and the product 35.5 parts, b0.6 230-5°, in 100 parts PhCl added dropwise at 50-5° to 30.7 parts POC13 and 14.6 parts HCONMe2 and stirred 12 hrs. at 50-5° yielded p-MeO2CC6H4CO2CH2CH2N(Br)C6H4CHO-p (III). III 38, NCCH2CO2Et 12, EtOH 20, and piperidine 1 part refluxed 2 hrs. yielded yellow I (R = H, R1 = Bu, R2 = p-MeO2C, X = CO2Et, Y = CO2), m. 120-1° (EtOH); it dyes polyester, polyamide, and triacetylcellulose fabrics greenish yellow shades of very good fastness properties. III with CH2(CN)2 gave similarly I (R = H, R1 = Bu, R2 = p-MeO2C, X = CN, Y = CO2), m. 88-90°. II (20.7 parts) treated with 19.9 parts p-MeO2CC6H4COCl and 11 parts Et3N at 80-100°, and the condensation product formylated yielded 2,4-Me[p-MeO2CC6H4CO2CH2CH2N(Bu)]C6H3CHO; a 40-part portion in 100 cc. Et3N with 7 parts CH2(CN)2 in BuOH yielded greenish yellow I (R = Me, R1 = Bu, R2 = MeO2C, X = CN, Y = CO2), m. 112-14° (EtOH). Et(HOCH2CH2)NPh condensed with o-MeO2CC6H4COCl and then formylated, and the resulting 2,4-Me[o-MeO2CC6H4CO2CH2CH2N(Et)]C6H3CHO treated with CH2(CN)2 yielded I (R = Me, R1 = Et, R2 = o-MeO2C, X = CN, Y = CO2), m. 100-1°. 3-Me derivative of II condensed with p-ClCO2C6H4CO2Me, and the product heated to 150-200°, distilled (b0.5-0.6 198-207°), and then formylated with POC13-HCONMe2 gave 2,4-Me[p-MeO2CC6H4CO2CH2CH2N(Bu)]C6H3CHO, b1.6 279-80°, which with CH2(CN)2 yielded I (R = Me, R1 = Bu, R2 = p-MeO2C, X = CN, Y = O), m. 84-7°. m-MeC6H4N(CH2CH2Cl)Et (IV) 59.5, HCONMe2 100, and PhONa 34.8 parts gave m-MeC6H4N(CH2CH2OPh)Et, b0.8 155-63°, which formylated and condensed with NCCH2CO2Et yielded I (R = Me, R1 = Et, R2 = H, X = CO2Et, Y = O), m. 74-5°. IV 59.8, HCONMe2 357, and p-MeO2CC6H4CO2K 72.5 parts heated 7 hrs. at 140°, concentrated, and treated with 95 parts POC13 yielded 2,4-Me[p-MeO2CC6H4CO2CH2CH2N(Et)]C6H3CHO, m. 77-80°, which condensed with CH2(CN)2 yielded I (R = Me, R1 = Et, R2 = p-EtO2C, X = CN, Y = CO2), m. 136-8°. m-MeC6H2N(CH2CH2OH)Et 71.5 with ClCO2Ph 69.0 and Et3N 44.5 parts gave m-MeC6H3N(CH2CH2OCO2Ph)Et which formylated and condensed with CH2(CN)2 yielded I (R = Me, R1 = Et, R2 = H, X = CN, Y = OCO2). m-MeC6H4(CH2CH2Cl)2 23.2, NaOPh 24, and (MeOCH2CH2)2O 50 parts refluxed 1-2 hrs., and the product formylated gave 2,4-Me[(PhOCH2CH2)2N]C6H3CHO, m. 82-4° (EtOH), which condensed with

CH₂(CN)₂ yielded I (R = Me, R₁ = PhOCH₂CH₂, R₂ = H, X = CN, Y = O); it dyes greenish yellow shades.

IT 1081794-87-7P
 RL: SPN (Synthetic preparation); PRP (Properties); PREP (Preparation)
 (Aminoarylidenacetone nitrile dyes)

RN 1081794-87-7 CAPLUS

CN Benzoic acid, 4-[2-[butyl(4-formyl-3-methylphenyl)amino]ethoxy]-, methyl ester (CA INDEX NAME)



L4 ANSWER 3 OF 9 CAPLUS COPYRIGHT 2008 ACS on STN

ACCESSION NUMBER: 1963:408695 CAPLUS

DOCUMENT NUMBER: 59:8695

ORIGINAL REFERENCE NO.: 59:1531d-h,1532a-d

TITLE: Quaternary ammonium salts from tertiary 2-phenoxyethylamines

INVENTOR(S): Copp, Frederick C.; Elphick, Albert R.; Coker, Geoffrey G.

PATENT ASSIGNEE(S): Wellcome Foundation Ltd.

SOURCE: 13 pp.

DOCUMENT TYPE: Patent

LANGUAGE: Unavailable

FAMILY ACC. NUM. COUNT: 1

PATENT INFORMATION:

| PATENT NO. | KIND | DATE | APPLICATION NO. | DATE |
|------------------------|------|----------|-----------------|--------------|
| GB 919126 | | 19630220 | GB | 19580701 <-- |
| PRIORITY APPLN. INFO.: | | | GB | 19580701 |

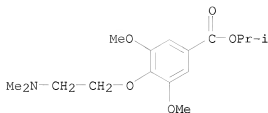
GI For diagram(s), see printed CA Issue.

AB (Phenoxyalkyl)dialkylamines are treated with alkyl halides to give I and II, where R and R₁ are Me or Et, R₂ and R₃ are H, halogen, MeO, or Me, Y is NO₂, Cl, an alkyl, or an alkoxy group, Z is a C₁-3 alkoxy group, and X is iodine or Br; I and II can be used as depressants for the peripheral sympathetic nervous system. Thus, 136 g. 4-hydroxy-3,5-dimethylbenzophenone is added to a solution of 13.8 g. Na in 950 mL. hot EtOH, 136 g. BrCH₂CH₂Br added, the mixture refluxed 7 h., .apprx. 700 mL. EtOH evaporated in vacuo, the residue poured into 500 mL. H₂O, the oil that sep. extracted with Et₂O, the extract washed with 5N NaOH, the

Et₂O evaporated, and the residue distilled to give 2-(4-benzoyl-2,6-dimethylphenoxy)ethyl bromide (III), b_{0.01} 182-6°, m.p. 76°. A mixture of 16.7 g. III and 50 g. 25% Me₂NH(MeOH) is heated in a sealed tube at 100° 6 h., the mixture evaporated, excess 5N NaOH added to the residue, the oil that sep. extracted with Et₂O, the Et₂O evaporated, and the residue distilled to give 1-(4-benzoyl-2,6-dimethylphenoxy)-2-dimethylaminoethane (IV), b_{0.001}

162-7°. MeI (4 g.) is added to a solution of 4 g. IV in Me₂CO, the mixture kept 1 h., refluxed 30 min., and cooled to give N-[2-(4-benzoyl-2,6-dimethylphenoxy)ethyl]-N,N,N-trimethylammonium iodide, m. 208-9° (EtOH). Similarly prepared are I (Y, R₂, R₃, R, R₁, X, m.p. given): H, Me, Me, Me, Et, iodine, 185-6° (EtOH); H, Me, Me, Me, Br, 204-5° (iso-PrOH); p-Me, Me, Me, Me, Me, Br (hemihydrate), 216-17° (EtOH-iso-PrOH); m-Me, Me, Me, Me, Me, Br, 221°; o-Cl, Me, Me, Me, Me, Br, 204-5°; m-Cl, Me, Me, Me, Me, Br, 203-4°; p-Cl, Me, Me, Me, Me, Br, 226-7°; o-MeO, Me, Me, Me, Br, 216-17°; m-MeO, Me, Me, Me, Br, 176-8°; p-MeO, Me, Me, Me, Me, Br, 189-90°; p-EtO, Me, Me, Me, Me, Br, 203°; p-NO₂: Me, Me, Me, Me, Br, 240-1°; H, Cl, Cl, Me, Me, Br, 186°, H, H, H, Me, Me, Br, 196-7°; p-NH₂, Me, Me, Me, Me, iodine, 239-41°; H, H, Br, Me, Me, iodine, 209-10° (MeOH); H, H, Br, Me, Et, iodine, 165-6°; H, H, Cl, Me, Me, Br, 199-200° (iso-PrOH-Et₂O); H, H, F, Me, Me, iodine, 227-80°; H, H, F, Me, Et, iodine (hemihydrate), 211-12°; H, Br, Me, Me, Me, iodine, 178-9° (EtOH-iso-PrOH); H, Me, Et, Me, Et, iodine, 221-2°; H, Me, Me, Me, HO(CH₂)₂, iodine, 160-1° (EtOH); H, Me, Me, HO(CH₂)₂, HO(CH₂)₂, iodine, 110-11°; H, Me, Me, Et, Et, iodine, 149-50° (EtOH); H, H, MeO, Me, Me, iodine, 189-90° (EtOH-ether); H, Me, Me, Me, Me, Cl (hydrate), 209° (iso-PrOH-Et₂O); and H, Me, Me, Me, MeSO₄, 138-9° (EtOH-EtOAc). Similarly prepared are II (Z, R₂, R₃, R, R₁, X, m.p. given): Me, Me, Me, Me, Me, iodine, 182-3° (EtOH); Et, Me, Me, Me, Me, iodine, 181-2° (EtOH); Et, Me, Me, Me, Et, Br, 109-11° (iso-PrOH-Et₂O); PhCH₂, Me, Me, Me, Me, Br, 148-50° (iso-PrOH); EtO, H, H, Me, Me, iodine, 157-60° (EtOAc-EtOH); MeO, H, H, Me, Me, iodine, 205-7° (Me₂CO-EtOAc); MeO, Me, H, Me, Me, iodine, 149-51° (EtOH-EtOAc); MeO, Me, Me, Me, Me, iodine, 213-15° (EtOH-EtOAc); EtO, H, H, Et, Et, iodine, 128° (EtOH-EtOAc); EtO, Me, H, Me, Me, iodine, 163-5° (EtOH-EtOAc); iso-PrO, Me, Me, Me, Me, Me, iodine, 186-7° (iso-PrOH); MeO, MeO, H, Me, Me, iodine 181-4° (EtOH); EtO, MeO, H, Me, Me, iodine, 136-8° (EtOH); EtO, MeO, MeO, Me, Me, iodine, 208-10° (EtOH); MeO, Br, H, Me, Me, iodine, 196-9° (EtOH); MeO, Br, H, Me, Et, iodine, 186-9° (EtOH); EtO, Br, H, Me, Me, iodine, 184-5° (iso-PrOH); EtO, Br, H, Me, Et, iodine, 121-4° (iso-PrOH); and EtO, Me, Me, Me, Me, iodine, 177-9° (EtOH-EtOAc). Also prepared are (m.p. given) N-[3-(4-benzoyl-2,6-dimethylphenoxy)propyl]-N,N,N-trimethylammonium bromide, 160-1°; N-[2-(4-benzoyl-2,6-dimethylphenoxy)-1-methylethyl]-N,N,N-trimethylammonium iodide, 215-16° (EtOH); N-[2-(4-benzoyl-2,6-dimethylphenoxy)-2-methylethyl]-N,N,N-trimethylammonium iodide, 167° (EtOH); N-[2-(4-benzoyl-3-hydroxyphenoxy)ethyl]-N,N,N-trimethylammonium iodide, 139-40° (EtOH); N-[2-(4-acetamido-2,6-dimethylphenoxy)ethyl]-N,N,N-trimethylammonium iodide, 242-4° (MeOH); and N-[2-(4-propionylamino-2,6-dimethylphenoxy)ethyl]-N,N,N-trimethylammonium iodide, 197-9° (EtOH).

IT 875831-55-3P, Benzoic acid,
4-[2-(dimethylamino)ethoxy]-3,5-dimethoxy-, isopropyl ester
RL: PREP (Preparation)
(preparation of)
RN 875831-55-3 CAPLUS
CN Benzoic acid, 4-[2-(dimethylamino)ethoxy]-3,5-dimethoxy-, 1-methylethyl
ester (CA INDEX NAME)



L4 ANSWER 4 OF 9 CAPLUS COPYRIGHT 2008 ACS on STN

ACCESSION NUMBER: 1963:408694 CAPLUS

DOCUMENT NUMBER: 59:8694

ORIGINAL REFERENCE NO.: 59:1531c-d

TITLE: Catalytic reduction of haloaromatic nitro compounds to haloaromatic amines

INVENTOR(S): Dietzler, Andrew J.; Keil, Theodore R.

PATENT ASSIGNEE(S): Dow Chemical Co.

SOURCE: 3 pp.

DOCUMENT TYPE: Patent

LANGUAGE: Unavailable

FAMILY ACC. NUM. COUNT: 1

PATENT INFORMATION:

| PATENT NO. | KIND | DATE | APPLICATION NO. | DATE |
|------------------------|------|----------|-----------------|--------------|
| US 3067253 | | 19621204 | US 1958-746334 | 19580703 <-- |
| PRIORITY APPLN. INFO.: | | | US | 19580703 |

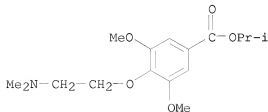
AB Good yields of haloaromatic amines are obtained from the catalytic hydrogenation of haloaromatic nitro compds. in the presence of 0.1-0.3 g. Ca(OH)₂ per g. Raney Ni catalyst. Thus, the following redns. were carried out: m-BrC₆H₄NO₂ to m-BrC₆H₄NH₂, 83-7%; 4,3-Br(O₂N)C₆H₃Ph to 4,3-Br(H₂N)C₆H₃Ph, 86.3%; 3,4-Br(O₂N)C₆H₃OH to 3,4-Br(H₂N)C₆H₃OH, 72.9%; 3,4-Cl₂C₆H₃NO₂ to 3,4-Cl₂C₆H₃NH₂, 91.3%; and 2,5-Br₂C₆H₃NO₂ to 2,5-Br₂C₆H₃NH₂, 88.5%. CaCO₃, Ca(OAc)₂, Mg(OH)₂, NaOAc, or Na₂CO₃ may be used in place of Ca(OH)₂.

IT 875831-55-3P, Benzoic acid, 4-[2-(dimethylamino)ethoxy]-3,5-dimethoxy-, isopropyl ester
RL: PREP (Preparation)

(preparation of)

RN 875831-55-3 CAPLUS

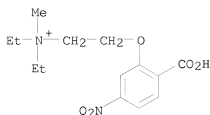
CN Benzoic acid, 4-[2-(dimethylamino)ethoxy]-3,5-dimethoxy-, 1-methylethyl ester (CA INDEX NAME)



L4 ANSWER 5 OF 9 CAPLUS COPYRIGHT 2008 ACS on STN

ACCESSION NUMBER: 1954:28918 CAPLUS
 DOCUMENT NUMBER: 48:28918
 ORIGINAL REFERENCE NO.: 48:5219h-i,5220a-c
 TITLE: Quaternary ammonium salts of tertiary aminoalkyl
 2-(tertiary aminoalkoxy)-4-substituted-benzoates
 Clinton, Raymond O.; Laskowski, Stanley C.
 INVENTOR(S):
 PATENT ASSIGNEE(S): Sterling Drug Inc.
 DOCUMENT TYPE: Patent
 LANGUAGE: Unavailable
 FAMILY ACC. NUM. COUNT: 1
 PATENT INFORMATION:

| | PATENT NO. | KIND | DATE | APPLICATION NO. | DATE |
|----|--|------|----------|-----------------|--------------|
| | US 2642435 | | 19530616 | US 1951-245249 | 19510905 <-- |
| AB | <p>Preparation and properties are described for series of compds. having 2 quaternary ammonium groups, which have ganglionic blocking activity. Thus, 2-(tertiaryaminoalkoxy)-4-nitrobenzoic acids are heated in refluxing EtOH or PROH with a tertiary-aminoalkyl halide to yield tertiary aminoalkyl 2-(tertiary aminoalkoxy)-4-nitrobenzoates. These are reacted with 2 equivalent of MeI to form the corresponding dibasic quaternary ammonium salts. The nitro groups are then reduced by catalytic hydrogenation. Thus, 15.9 g. of 2-(2-diethylaminoethoxy)-4-nitrobenzoic acid-HCl, 8.1 g. Et₂NCH₂CH₂Cl, and 200 ml. iso-PROH are refluxed 7 hrs. and allowed to stand overnight. Purification yielded a straw-colored oil, 2-diethylaminoethyl 2-(2-diethylaminoethoxy)-4-nitrobenzoate (I) (di-HCl salt, m. 193-3.9°). To a solution of 4.8 g. of I in 125 ml. of EtOAc was added 20 ml. of MeI at room temperature. After standing overnight, precipitate was removed, washed, and recrystd. from absolute alc. to yield the dimethiodide (II) of I. II was reduced with H under reduced pressure at 50° in absolute alc. to give 2-diethylaminoethyl 2-(2-diethylaminoethoxy)-4-aminobenzoate-MeI, m. 210.5-11.9°. Similar preparation is described for 3-piperidinopropyl 2-(2-diethylaminoethoxy)-4-nitrobenzoate-2HCl, m. 214.4-15.2°; 2-morpholinoethyl 2-(2-diethylaminoethoxy)-4-nitrobenzoate-2HCl, m. 217-18°; 3-piperidinopropyl 2-(3-piperidinolpropoxy)-4-nitrobenzoate-2HCl, m. 213-14.1 (di-MeI, m. 203.6-4.2); 3-piperidinopropyl 2-(2-diethylaminoethoxy)-4-nitrobenzoate-2MeI, m. 113.4-15.5; 2-(2-methylpiperidinoethyl 2-(2-diethylaminoethoxy)-4-nitrobenzoate-2MeI, m. 201.1-2.9. All m.ps. are corrected Cf. preceding abstract</p> | | | | |
| IT | <p>878796-24-8, Ammonium, [2-(2-carboxy-5-nitrophenoxy)ethyl]diethylmethyl-, iodide (esters)</p> | | | | |
| RN | 878796-24-8 CAPLUS | | | | |
| CN | <p>Ethanaminium, 2-(2-carboxy-5-nitrophenoxy)-N,N-diethyl-N-methyl-, iodide (1:1) (CA INDEX NAME)</p> | | | | |



L4 ANSWER 6 OF 9 CAPLUS COPYRIGHT 2008 ACS on STN

ACCESSION NUMBER: 1954:28917 CAPLUS

DOCUMENT NUMBER: 48:28917

ORIGINAL REFERENCE NO.: 48:5219b-h

TITLE: Quaternary ammonium salts of lower alkyl 2-(tertiary aminoalkoxy)-4-substituted-benzoates

INVENTOR(S): Clinton, Raymond O.; Laskowski, Stanley C.

PATENT ASSIGNEE(S): Sterling Drug Inc.

DOCUMENT TYPE: Patent

LANGUAGE: Unavailable

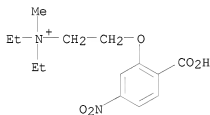
FAMILY ACC. NUM. COUNT: 1

PATENT INFORMATION:

| | PATENT NO. | KIND | DATE | APPLICATION NO. | DATE |
|----|--|------|----------|-----------------|--------------|
| | ----- | ---- | ----- | ----- | ----- |
| | US 2642434 | | 19530616 | US 1951-245248 | 19510905 <-- |
| AB | <p>The preparation of a series of quaternary ammonium compds. having ganglionic-blocking activity (cf. C.A. 46, 6108e; 44, 6403b) is described. Thus, to 42.2 g. 4,2-O₂N(HO)C₆H₃CO₂Et in 1 l. refluxing absolute alc. was added 4.6 g. Na in 500 ml. absolute alc., then 27.1 g. Et₂NCH₂CH₂Cl (I). 5 g. more I added after 3 hrs., refluxing continued 0.5 hr., the mixture cooled in ice, filtered, the filtrate evaporated to dryness in vacuo, the residue dissolved in 500 ml. EtOAc, filtered, and the filtrate evaporated to dryness to yield Et 2-(2-diethylaminoethoxy)-4-nitrobenzoate (II); HCl salt, m. 144.4-5.2° (yield 45.5 g.). II with Sn and HCl gave the 4-amino analog (III); III.HCl, m. 134-5° (from Me₂CO-EtOAc); III.2HCl, m. 173.6-3.9° (from absolute alc.-EtOAc); III.H₃PO₄, m. 168.7-9.6° (from 95% alc.). To 6 g. II in 50 ml. of EtOAc was added 15 ml. MeI, the solution refluxed 1.5 hrs., cooled, and the product filtered and washed with EtOAc; the II.MeI m. 143.1-4.6° (from iso-PrOH), was reduced by H and Pt at room temperature to III.MeI (IV) m. 139.2-41.1°. IV 10, PrCHO 5, PtO₂ 0.5 g. and 150 ml. absolute alc. treated at 50° with H under an unspecified pressure yielded Et 2-(2-diethylaminoethoxy)-4-(butylamino)benzoate-MeI. The following compds. having the general formula 3,4-RR1N(CH₂)_n(R₂O₂C)C₆H₃NO₂ are reported (n, R, R₁, R₂, salt, and m.p. of salt, resp., given): 2, Me, Me, Et, MeI, 190.2-1.2°; 2, Et, Et, Pr, HCl, 153.4-5.4° (MeI, 143.2-4.6°); 3, Et, Et, Et, HCl, 164.8-5.6° (MeI, 148-9.6°); 2, (NRR1 =) piperidino, Et, HCl 191-1.5° (MeI, 147.7-8.9°); 2, (NRR1 =) 2-methylpiperidino, Et, HCl 180.8-2.6° (MeI, 159.8-61.0°); 3, (NRR1 =) 2-methylpiperidino, Et, HCl, 158.2-9.6° (MeI</p> | | | | |

165.5-6.5°); 2, (NRR1 =) 2,6-dimethylpiperidino, Et, HCl, 153-4° (MeI, 192.3-2.9°); 2, (NRR1 =) morpholino, Et, HCl, 207-8° (MeI, m. 190.5-1.3°); 3, (NRR1 =) morpholino, Et, HCl, 142-4.6° (MeI, 161.1-1.7°); 2, Et, Et, Me, HCl, 156.9-9.2° (MeI, 162.5-3.0°); 2, (NRR1 =) morpholino, Me, HCl, 206-6.4° (MeI 209-11°). The following compds. having the general formula 3,4-RR1N(CH2)nO(R2O2C)C6H3NH2 are reported: 2, Et, Et, Me, MeI, m. 127.4-9.0°; 2, Et, Et, Pr, mono-H3PO4, 153-4° (MeI m. 127.4-9.6°); 3, Et, Et, Et, H3PO4 151.5-3.2° (MeI, m. 125-6°); 2, (NRR1 =) piperidino, Et, H3PO4, 220.8-1.4° (MeI, 167.4-8.4°; free base m. 107.3-8.5°); 2, (NRR1 =) 2-methylpiperidino, Et, 91.2-2.4°; 2, (NRR1 =) 2,6-dimethylpiperidino, Et, H3PO4 211-11.8° (MeI 123.4-6.4°); 3, (NRR1 =) 2-methylpiperidino, Et, 112.4-3.5° (H3PO4, 136.4-8.3°); 2, (NRR1 =) morpholino, Et, 98-9.8° (H3PO4, 196.3-6.9°; MeI 182.7-3.7°); 3, (NRR1 =) morpholino, Et, H3PO4, 143.4-4.4° (free base, m. 106.8-8.0°; MeI, 151.9-3.1°); 2, Me, Me, Et, H3PO4, 176.3-7.3° (MeI, 127.4-9.6°). Also reported is the preparation of Et 2-(2-chloroethoxy)-4-nitrobenzoate, m. 56.6-7.2°; Et 2-(2-diethylaminoethoxy)-4-(butylamino)benzoate-HCl, m. 160.5-1.8°. All m. ps. are corrected

IT 878796-24-8, Ammonium, [2-(2-carboxy-5-nitrophenoxy)ethyl]diethylmethyl-, iodide (esters)
 RN 878796-24-8 CAPLUS
 CN Ethanaminium, 2-(2-carboxy-5-nitrophenoxy)-N,N-diethyl-N-methyl-, iodide (1:1) (CA INDEX NAME)



● I⁻

L4 ANSWER 7 OF 9 CAPLUS COPYRIGHT 2008 ACS on STN

ACCESSION NUMBER: 1938:41768 CAPLUS

DOCUMENT NUMBER: 32:41768

ORIGINAL REFERENCE NO.: 32:5807a-c

TITLE: Amino ethers of phenolic benzoic esters

AUTHOR(S): Rohmann, C.; Koch, A.

SOURCE: Archiv der Pharmazie und Berichte der Deutschen Pharmazeutischen Gesellschaft (1938), 276, 154-64

CODEN: APBDJ; ISSN: 0376-0367

DOCUMENT TYPE: Journal

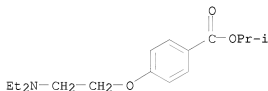
LANGUAGE: Unavailable

AB cf. C. A. 30, 4160.7. In the present study the carboxy group of p-HOC6H4CO2H has been esterified with different alcs., while the HO group was etherified with Et2NCH2CH2OH. The alkaline ethers thus carry a tertiary N radical. This ever-present group stands in the p-position to a varying ester group. This arrangement conditions the local anesthetic action. With the aid of the organoleptic test, it was found that all the compds. prepared were more or less locally anesthetic. The change in activity, since the ether group remained constant, must therefore depend on the variation of the alkyl radical in the ester group. All the compds. were tested along with novocaine, tutocaine, cocaine and pantocaine with respect to their physicochem. properties, and the results obtained herein reported. Among the alkyl p-diethylaminoethoxybenzoate-HCl prepared were: Et, m. 154°; Pr, m. 103°; iso-Pr m. 146°; Bu m. 74°; iso-Bu m. 92°; allyl, m. 176-7°.

IT 1071582-57-4P
RL: SPN (Synthetic preparation); PRP (Properties); PREP (Preparation)
(Amino ethers of phenolic benzoic esters)

RN 1071582-57-4 CAPLUS

CN Benzoic acid, 4-[2-(diethylamino)ethoxy]-, 1-methylethyl ester, hydrochloride (1:1) (CA INDEX NAME)



● HCl

L4 ANSWER 8 OF 9 CAPLUS COPYRIGHT 2008 ACS on SIN

ACCESSION NUMBER: 1934:60903 CAPLUS
DOCUMENT NUMBER: 28:60903
ORIGINAL REFERENCE NO.: 28:7429h-i,7430a-b
TITLE: Dialkylaminoalkyl esters of hydroxy-3-carboxybiphenyls
INVENTOR(S): Christiansen, Walter G.; Harvey, Adelbert W.
PATENT ASSIGNEE(S): E. R. Squibb & Sons
DOCUMENT TYPE: Patent
LANGUAGE: Unavailable
FAMILY ACC. NUM. COUNT: 1
PATENT INFORMATION:

| PATENT NO. | KIND | DATE | APPLICATION NO. | DATE |
|------------|------|----------|-----------------|------|
| US 1976922 | | 19341016 | US | <-- |

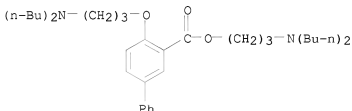
AB Compds. (suitable for use as local anesthetics in solution buffered with a phosphate) such as the dialkylaminoalkyl esters of 3 - carboxy - 4 - hydroxybiphenyl and 3 - carboxy - 2-hydroxybiphenyl and salts thereof, particularly 3-β-diethylaminocarbethoxy-4-hydroxybiphenyl and its

salts are prepared by converting the hydroxy-3-carboxybiphenyl to a salt, forming a halide ester, preferably a bromoalkyl ester from the salt and then forming the dialkylaminoalkyl ester from this. Purification of the 3- β -diethylaminocarbethoxy-4-hydroxybiphenyl hydrochloride may be accomplished by crystallization from absolute EtOH. The product, in the form of the hydrochloride, is a white crystalline substance soluble in water, m. 167-168.5°. The free ester is an almost colorless oil. Starting with 3-carboxy-2-hydroxybiphenyl and employing similar reactions, corresponding alkyl derivs. may be formed in which the hydroxy group is in the 2- instead of the 4-position.

IT 873986-35-7, Benzoic acid, 2-(γ -dibutylaminopropoxy)-5-phenyl-, γ -dibutylaminopropyl ester (and salts)

RN 873986-35-7 CAPLUS

CN [1,1'-Biphenyl]-3-carboxylic acid, 4-[3-(dibutylamino)propoxy]-, 3-(dibutylamino)propyl ester (CA INDEX NAME)



L4 ANSWER 9 OF 9 CAPLUS COPYRIGHT 2008 ACS on STN

ACCESSION NUMBER: 1934:60902 CAPLUS
 DOCUMENT NUMBER: 28:60902
 ORIGINAL REFERENCE NO.: 28:7429g-h
 TITLE: Dialkylaminoalkyl esters of dialkylaminoalkoxy-3-carboxybiphenyl
 INVENTOR(S): Christiansen, Walter G.; Braker, William
 PATENT ASSIGNEE(S): E. R. Squibb & Sons
 DOCUMENT TYPE: Patent
 LANGUAGE: Unavailable
 FAMILY ACC. NUM. COUNT: 1
 PATENT INFORMATION:

| | PATENT NO. | KIND | DATE | APPLICATION NO. | DATE |
|----|---|------|----------|-----------------|------|
| | US 1976921 | | 19341016 | US | <-- |
| AB | Comps. (suitable for use in the preparation of local anesthetics) such as 3- β -diethylaminocarbethoxy-4- β -diethylaminoethoxybiphenyl and 3- γ -dibutylaminocarbopropoxy - 4 - γ - dibutylaminopropoxybiphenyl are prepared from a hydroxy-3-carboxybiphenyl by forming its di-Na derivative and then replacing the Na atoms by dialkylaminoalkyl radicals (various details for preparing these comps. and their hydrochlorides and borates being given). | | | | |
| IT | 873986-35-7, Benzoic acid, 2-(γ -dibutylaminopropoxy)-5-phenyl-, γ -dibutylaminopropyl | | | | |

10/923,271

ester

(and salts)

RN 873986-35-7 CAPLUS

CN [1,1'-Biphenyl]-3-carboxylic acid, 4-[3-(dibutylamino)propoxy]-,
3-(dibutylamino)propyl ester (CA INDEX NAME)

